A METHOD FOR PREEMPTIVE SCREEN RENDERING

ABSTRACT

A method of rendering screen of a computer display device under conditions requiring frequent repainting of the screen is disclosed. The display is a part of a computer system running an application under control of an operating system. The application detects the onset of conditions requiring frequent repainting of the screen by checking messages sent by the operating system to the application's message queue. The application then starts the repainting of the screen based on the information retrieved from the queue while checking periodically the message queue to see if the originally detected conditions still apply. If this is the case, the application terminates the original repainting operation and starts a new repainting operation based on the updated information retrieved from the message queue. This cycle is repeated until it is determined that the originally detected conditions no longer apply, in which case a final complete repaint of the screen takes place. The method is particularly useful for the display of a graphically complex scene during a navigation operation, such as panning or zooming, when complete repainting of the scene as the navigation progresses fails to provide to the user an acceptable visual feedback of the navigation progress.